

CLM PTO

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1. A furnace for uniformly heating an optical fiber preform in an optical fiber draw tower, said furnace comprising:

a main body;

a sub-body placed coaxially with said main body and having a diameter smaller than said main body; and,

an upper gas feeding section disposed over said main body, wherein said upper gas feeding section includes a first hollow rotary body having at least one slit in the inner surface thereof along the longitudinal direction of an optical fiber and at least one opening extended in the direction of the center, whereby a gas creates non-contact polarization to the optical fiber through said first hollow rotary body.

2. The furnace according to Claim 1, further comprising a middle gas feeding section between said main body and said sub-body, wherein said middle gas feeding section includes a second hollow rotary body having at least one slit in the longitudinal direction of the optical fiber.

Art Unit: 1700

3. The furnace according to Claim 1, further comprising a lower gas feeding section under said sub-body, wherein said lower gas feeding section includes a third hollow rotary body having at least one slit along the longitudinal direction of the optical fiber.

4. The furnace according to Claim 1, wherein said slit is linearly extended about the longitudinal direction of the optical fiber.

Claims 5 and 6 are cancelled.

7. The furnace according to Claim 1, wherein said slit is inclined at an angle about the longitudinal direction of the optical fiber.

Claims 8 and 9 are cancelled.

10. The furnace according to Claim 1, wherein said slit is spirally provided about the longitudinal direction of the optical fiber.

Claims 11 and 12 are cancelled.

Claims 13-16 are cancelled.

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